

Appl. No. 09/629,717
Amdt. dated February 9, 2004
Reply to Office Action of December 10, 2003

Remarks

The present amendment responds to the final Official Action dated December 10, 2003. The Official Action rejected claims 1-20 under 35 U.S.C. §102(b) based on Frey et al. U.S. Patent No. 5,557,513 ("Frey"). This sole ground of rejection is addressed below following a brief discussion of the present invention to provide context.

Independent claims 1, 7, 13, 16, 19, and 20 have been amended according to suggestions made in the Response to Amendments section of the Official Action. The text of the Official Action's Response to Amendments section suggests identifying what is an input event and subsequently what constitutes a retail performance metric. Independent claims 1, 7, 13, 16, 19, and 20 have been amended to add the text "wherein the event occurring at the POS station is a scan operation, a weighing operation, a key operation, or a tender operation" to clarify the input which is received. Independent claims 1, 7, 13, 16, 19, and 20 also have been amended to remove the text "recording the entry record" from the repeating step to be more clear. Other minor wording changes of a clarifying nature have been made.

Claims 1-20 are presently pending.

The Present Invention

The present invention provides methods and apparatus for tracking individual retail performance metrics occurring during a transaction at a point of sale terminal. A particular retail performance metric (RPM), for example, the time a system waits for or spends scanning a product, weighing a product, keying input to the POS terminal, or the like, is recorded. The

Appl. No. 09/629,717
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particular RPM is determined based on the type of input received by the system, depending on whether the input received is related to scanning a product, weighing a product, keying input to the POS terminal, or the like. An RPM record, including the time and type of input received, is stored in a transaction log associated with an individual transaction entry and/or time type category. For each input received during a transaction, a separate RPM record is stored in the transaction log allowing individual RPMs to be tracked within the transaction.

By way of an example, an overall transaction in accordance with the present invention may include several different operations performed by a cashier who services a customer purchasing multiple items at a POS station. For example, some items may have attached bar codes for scanning by the POS station while other items, such as produce items, may require weighing by the POS station. Produce or or items with defective bar codes may require the cashier to key in certain data. Each of the scanning events, weighing events, and keying events would result in separate RPM records being recorded in a transaction log and associated with a record defining the transaction. The tracking of these RPM records results in decomposing the transaction into finer details. Such finer details advantageously help identify deficiencies and potential problems at the POS station. For example, a record of a series of scans requiring an inordinate amount of time may indicate a cashier who needs more training or a scanner which needs cleaning or repair.

In one aspect, the present invention relates to a computer implemented method of tracking retail performance metrics associated with a transaction. An input indicative of an event occurring is received and a transaction entry or entry record corresponding to the input received

Appl. No. 09/629,717
Amdt. dated February 9, 2004
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is recorded. A retail performance metric record, including an identifier corresponding to the entry record, is recorded independent of the entry record. Typically, multiple events occur during the transaction, and multiple retail performance metric records for the transaction are tracked.

The Art Rejections

The sole art rejection hinges on the application of Frey. As addressed in greater detail below, the relied upon art does not support the Official Action's reading of it and the rejection based thereupon should be reconsidered and withdrawn. Further, the Applicants do not acquiesce in the analysis of Frey made by the Official Action and respectfully traverse the Official Action's analysis underlying its rejections.

The Official Action rejected claims 1-20 under 35 U.S.C. §102(b) as being anticipated by Frey. Frey is entitled "Checkout Lane Alert System and Method for Stores Having Express Checkout Lanes." Frey describes a system which monitors the number of shoppers entering and leaving a store. Using statistical modeling techniques and previously gathered data, Frey's system predicts shopper traffic at checkout lanes in the store. Thus, a store manager can assign more cashiers to the checkout stations in a preemptive move, rather than allowing lines of waiting customers to grow. While Frey does indicate that the POS system registers each transaction and records the time of each transaction, Frey explicitly states that a transaction is defined as "a single buyer checking out through a checkout lane, and not by the number of purchases" by each buyer. Frey, col. 6, lines 3-6. In other words, Frey appears to be concerned

Appl. No. 09/629,717
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only with the number of customers passing through the checkout lanes, and not with events that occur during a checkout transaction as previously claimed. Thus, Frey's approach does not teach and does not make obvious the tracking of multiple events with respect to scanning products, weighing products, receiving payments, or keying input to the POS station within a transaction as presently claimed.

In contrast to Frey, the present invention provides techniques for tracking retail performance metric (RPM) records for multiple events in a checkout transaction. More particularly, for each input received, such as an input resulting from a scan operation, a weighing operation, a key operation, or a tender operation, an RPM record is recorded. The stored records are associated for each event of a plurality of events occurring during a transaction at a POS station. Claim 1, as presently amended, reads as follows:

1. A computer implemented method of tracking a plurality of retail performance metric records within a transaction, each retail performance metric record being a function of a retail performance metric type and the time elapsed waiting for and receiving an input, comprising the steps of:
 - receiving an input indicative of an event occurring at a point of sale (POS) station during a transaction, wherein the event occurring at the POS station is a scan operation, a weighing operation, a key operation, or a tender operation;
 - recording an entry record indicative of the input received at the POS station during the transaction;
 - recording a retail performance metric record, the retail performance metric record being a function of the retail performance metric type and the time elapsed waiting for and receiving an input;
 - associating the retail performance metric record with the entry record; and
 - repeating the steps of receiving an input indicative of an event occurring at the POS station during the transaction, recording a retail performance metric record, and associating for a plurality of events during the transaction. (emphasis added)

Appl. No. 09/629,717
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Frey does not disclose and does not claim "receiving an input indicative of an event occurring at a point of sale (POS) station during a transaction, wherein the event occurring at the POS station is a scan operation, a weighing operation, a key operation, or a tender operation" as presently claimed. Frey also does not disclose and does not claim "repeating the steps of receiving an input indicative of an event occurring at the POS station during the transaction, recording a retail performance metric record, and **associating for a plurality of events during the transaction**" as presently claimed. (emphasis added) See also independent claims 7, 13, 16, 19, and 20.

Although the Frey approach when interpreted broadly may suggest a performance measure such as the number of customers a cashier may serve, it does not address granular retail performance metrics within a transaction which allows a store manager, for example, to advantageously address problem areas within the transaction. Tracking events within a transaction may result, for example, in providing a cashier with additional training or in providing maintenance to a POS peripheral, such as a bar code scanner.

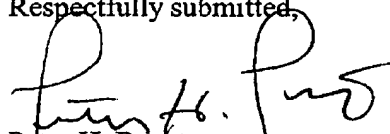
Nothing in the cited reference indicates a recognition of the problems addressed by the present invention. To sum up, the claims of the present invention are not taught, are not inherent, and are not obvious in light of the art relied upon.

Appl. No. 09/629,717
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Conclusion

All of the presently pending claims, as amended, appearing to define over the applied references, withdrawal of the present rejection and prompt allowance are requested.

Respectfully submitted,



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